

Appl. No. 10/657,785
Resp. dtd. September 20, 2007
Resp. to Office action dtd. March 20, 2007

REMARKS

Claims 38-54 were pending in the application at the time of the Office Action, to which claims 55-56 have been added by this response.

Claims 39-43, 46, 49, 53 and 54 stand rejected under 35 U.S.C. § 102 as being anticipated by United States Patent No. 4,964,121 to Moore (“*Moore*”).

Claims 38, 44, 45, 50 and 52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Moore* in view of United States Patent No. 5,440,460 to Rypinski (“*Rypinski*”).

Claims 47, 48 and 51 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 55 and 56 have been added by the present amendment

For at least the reasons stated below, the Applicants respectfully traverse the above rejections and objections.

35 U.S.C. § 102 Rejections

Turning first to the rejection of claims 39-43, 46, 49, 53 and 54 under 35 U.S.C. § 102 as being anticipated by *Moore*, the Applicants respectfully traverse this rejection.

MPEP § 2131 states that to anticipate a claim, the reference must teach every element of the claim. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Independent claim 39 states “the node in an active state entering a low power state in response to at least a second timer signal”.

The Office Action, on page 2, states that *Moore* (e.g., at the Abstract; figures 5-6, item 216; and col. 7, line 31 to col. 8, line 65) teaches “the node in an active state entering a low

power state in response to at least a second timer signal". The Applicants respectfully disagree with this characterization of *Moore*.

For example, the Applicants were unable to find mention in *Moore* of a second timer signal, in response to which the node enters a low power state. In col. 7, lines 41-48, *Moore* discusses the communication unit attempting to acquire bit synchronization during a synchronization acquisition interval. As an example, *Moore* discusses the communication unit, during the synchronization acquisition interval, performing a correlation analysis on groups of bits over a set of 85 received bits. Also, in col. 7, line 67 to col. 8, line 5, *Moore* discusses the utilization of a programmable timer to generate an interrupt signal to reset the CPU and *remove* the communication unit from a power-saving state. The Applicants were, however, unable to find an indication in *Moore* of a timer signal being utilized to cause the node in an active state to enter a low power state. For at least this reason, the Applicants submit that independent claim 39 is allowable over *Moore*.

Turning next to independent claim 40, such claim, as currently amended, states "the node in a low power state waking at a timed interval to receive a particular type of packet that is broadcast periodically in a broadcast packet time slot".

The Office Action, on page 3, states that *Moore* (e.g., at figures 5-6, item 216; and col. 7, line 31 to col. 8, line 65) teaches "the node in a low power state waking at a timed interval to receive a packet broadcast periodically in a broadcast packet time slot". The Applicants respectfully disagree with this characterization of *Moore*.

Also, the Applicants were unable to find mention in *Moore* of a particular type of packet that is broadcast periodically or mention of a node waking at a timed interval to receive a particular type of packet.

In FIG. 4 and the related discussion, *Moore* shows a system where frames of any of a variety of types might be broadcast in regularly occurring timeslots. For example, in FIG. 4b, *Moore* shows a transmit time slot being subdivided into command/attribute pairs. *Moore* mentions such commands including a status command and an address command with corresponding attribute information. As explained at col. 7, lines 41-44, *Moore*'s communication units may perform correlation analysis during receive time slots to detect a valid

command or attribute word, to which the communication unit may synchronize. *Moore* does not, however, appear to discuss a message structure in which a particular type of packet is broadcast periodically.

Additionally, *Moore* (e.g., at col. 7, line 32 to col. 8, line 65) appears to discuss activating the communication node to receive some type of information, for example, any of a plurality of commands. However, the Applicants have been unable to find mention in *Moore* of waking a node at a timed interval to receive a particular type of packet. For at least these reasons, the Applicants submit that claim 40 is allowable over *Moore*, as are all claims depending therefrom, including claims 41 and 46-48. The Applicants also submit that each of claims 41 and 46-48 is independently allowable.

Turning next to claim 41, such claim depends from claim 40 and further states “wherein the node switches from the active state to the low power state if the node does not receive a message within a second timed interval”. The Office Action, at page 3, states that *Moore* (e.g., at the Abstract; figures 5-6, item 216; and col. 7, line 31 to col. 8, line 65) teaches “wherein the node switches from the active state to the low power state if the node does not receive a message within a predetermined period of time”. The Applicants respectfully disagree with this characterization of *Moore*.

For example, the Applicants were unable to find mention in *Moore* of such a second timed interval. In col. 7, lines 41-48, *Moore* discusses the communication unit attempting to acquire bit synchronization during a synchronization acquisition interval. As an example, *Moore* (at col. 7, lines 45-52) discusses the communication unit, during the synchronization acquisition interval, performing a correlation analysis on groups of bits over a set of 85 received bits. If *Moore*’s communication unit fails to detect a valid command and/or attribute within the 85 bit interval, the communication unit will reduce power consumption for an asynchronous power saving interval (See col. 7, lines 52-55). Also, in col. 7, line 67 to col. 8, line 5, *Moore* discusses the utilization of a programmable timer to generate an interrupt signal to reset the CPU and remove the communication unit from a power-saving state. The Applicants were, however, unable to find an indication in *Moore* of a node entering a low power state if the node does not receive a message within a timed interval. For at least this additional reason, the Applicants

submit that independent claim 41 is allowable over *Moore*, as are all claims depending therefrom, including claims 46-48. The Applicants also submit that each of claims 46-48 is independently allowable.

Turning next to independent claim 42, such claim, as currently amended, states “receiving at a waken node a message of a particular type that is broadcast periodically in a broadcast message time slot”.

The Office Action, at page 3, states that *Moore* (e.g., at figures 5-6, item 216; and col. 7, line 31 to col. 8, line 65) teaches “receiving at a waken node a message broadcast periodically in a broadcast message time slot”. The Applicants respectfully disagree with this characterization of *Moore*.

As discussed previously with regard to claim 40, the Applicants were unable to find mention in *Moore* of a particular type of message that is broadcast periodically. For at least this reason, the Applicants submit that claim 42 is allowable over *Moore*, as are all claims depending therefrom, including claims 49-51. The Applicants also submit that each of claims 49-51 is independently allowable.

Turning next to claim 43, such claim shares many characteristics with claim 42. Thus, claim 42 is allowable for at least reasons analogous to those discussed previously with regard to claim 42. Also, claim 43 states “switching the node to the low power state if a message is not received in the active state for a predetermined period of time”.

The Office Action, at page 4, states that *Moore* (e.g., at figures 5-6, item 216; and col. 7, line 31 to col. 8, line 65) teaches “switching the node to the low power state if a message is not received in the active state for a predetermined period of time”. The Applicants respectfully disagree with this characterization of *Moore*.

For example, the Applicants were unable to find mention in *Moore* of such a predetermined period of time. In col. 7, lines 41-48, *Moore* discusses the communication unit attempting to acquire bit synchronization during a synchronization acquisition interval. As an example, *Moore* (at col. 7, lines 45-52) discusses the communication unit, during the synchronization acquisition interval, performing a correlation analysis on groups of bits over a set of 85 received bits. If *Moore*’s communication unit fails to detect a valid command and/or

attribute within the 85 bit interval, the communication unit will reduce power consumption for an asynchronous power saving interval (See col. 7, lines 52-55). Also, in col. 7, line 67 to col. 8, line 5, *Moore* discusses the utilization of a programmable timer to generate an interrupt signal to reset the CPU and *remove* the communication unit from a power-saving state. The Applicants were, however, unable to find an indication in *Moore* of a node entering a low power state if a message is not received in the active state for a predetermined period of time. For at least these reasons, the Applicants submit that independent claim 43 is allowable over *Moore*.

Turning next to claim 46, such claim depends from claim 41 and further states “wherein expiration of the second timed interval is indicated by expiration of a timer set in accordance with a maximum time for which the node is to remain awake waiting for a message addressed to the node.”

The Office Action, on pages 4-5, states that *Moore* teaches “wherein expiration of the second time interval is indicated by expiration of a timer set in accordance with a maximum time for which the node is to remain awake waiting for a message addressed to the node”. The Applicants respectfully disagree with this characterization of *Moore*.

For example, as discussed previously with regard to claim 39, the Applicants were unable to find an indication in *Moore* of a timer being utilized to cause the node in an active state to enter a low power state. Additionally, the Applicants were unable to find mention in *Moore* of remaining awake for a message addressed to the node. As discussed by *Moore* in col. 7, lines 35-52, *Moore*’s communication unit receives and synchronizes to any recognized command and/or attribute. Thus, *Moore*’s communication unit does not appear to remain awake for a message addressed to the communication unit. For at least these reasons, the Applicants submit that independent claim 46 is allowable over *Moore*.

Turning next to claim 49, such claim depends from claim 42. Thus, claim 49 is allowable for at least the reasons discussed previously with regard to claim 42. Additionally, the Applicants submit that claim 49 is independently allowable.

Turning next to independent claim 53, such claim shares various characteristics with claim 39. As stated previously with regard to claim 39, the Applicants were unable to find an indication in *Moore* of a timer signal being utilized to cause the node in an active state to enter a

low power state. For at least this reason, the Applicants submit that claim 53 is allowable over *Moore*.

Turning next to independent claim 54, such claim, as currently amended, shares various characteristics with claim 40. Similar to the previous discussion regarding claim 40, the Applicants were unable to find mention in *Moore* of a particular type of packet that is broadcast periodically or mention of a node waking at a timed interval to receive a particular type of packet. For at least these reasons, the Applicants submit that claim 54 is allowable over *Moore*.

35 U.S.C. § 103 Rejections

Turning next to the rejection of claims 38, 44, 45, 50 and 52 as being unpatentable over *Moore* in view of *Rypinski*, the Applicants respectfully traverse these rejections.

MPEP § 2142 states that in order for a *prima facie* case of obviousness to be established, three basic criteria must be met, one of which is that the reference or combination of references must teach or suggest all of the claim limitations. MPEP § 2143.03 states that to establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

Independent claim 38, as currently amended, states “the node in the low power state switching to the active state at regular intervals to receive a periodically broadcasted polling message”.

As discussed previously with regard to claim 40, the Applicants were unable to find mention in *Moore* of a particular type of packet (or message) that is broadcast periodically or mention of a node waking at a timed interval to receive a particular type of packet (or message), much less a periodically broadcasted polling message. In *Moore*, the communication unit wakes to receive any of a number of different types of frames (e.g., commands and/or attributes) rather than a particular type of message, for example, a periodically broadcast polling message. For the sake of argument only, even if one of *Moore*’s frames could be a polling message, there is no indication that such a message would be periodically broadcast nor any indication that *Moore*’s communication unit would switch to the active state at regular intervals to receive a periodically broadcasted polling message. For at least these reasons, the Applicants submit that claim 38 is allowable over *Moore* and *Rypinski*, individually or in combination.

Turning next to independent claim 44, such claim states “a first node for periodically broadcasting a polling message”. As discussed previously with regard to claim 38, even if, for the sake of argument only, one of *Moore*’s frames could be a polling message, there is no indication that such a message would be periodically broadcast.

Additionally, claim 44 states “the second node switching from the active state to the low power state if a message is not received in the active state for a predetermined period of time”. As discussed previously with regard to claim 43, the Applicants were unable to find an indication in *Moore* of a node entering a low power state if a message is not received in the active state for a predetermined period of time. For at least these reasons, the Applicants submit that independent claim 43 is allowable over *Moore* and *Rypinski*, individually or in combination.

Turning next to independent claim 45, such claim states “switching the node from the active state to a low power state if a message is not received for a predetermined period of time in the active state”. As discussed previously with regard to claim 43, the Applicants were unable to find an indication in *Moore* of a node entering a low power state if a message is not received in the active state for a predetermined period of time.

Additionally, claim 45 states “periodically broadcasting from another node a polling message”. As discussed previously with regard to claim 38, even if, for the sake of argument only, one of *Moore*’s frames could be a polling message, there is no indication that such a message would be periodically broadcast.

Further, claim 45 states “waking the node in the low power state at timed intervals to receive a broadcast polling message”. As discussed previously, in *Moore*, the communication unit wakes to receive any of a number of different types of frames rather than a particular type of message, for example, a broadcast polling message. For the sake of argument only, even if one of *Moore*’s frames could be a polling message, there is no indication that *Moore*’s communication unit would wake at timed intervals to receive a broadcast polling message. For at least these reasons, the Applicants submit that independent claim 45 is allowable over *Moore* and *Rypinski*, individually or in combination.

Turning next to claim 50, such claim depends from claim 42, which was discussed previously. Additionally, *Rypinski* fails to cure the previously mentioned deficiencies of *Moore*. Thus, claim 50 is allowable for at least the reasons stated previously with regard to claim 42.

Turning next to claim 52, such claim, as currently amended, shares various characteristics with claim 38. As discussed previously with regard to claim 38, the Applicants were unable to find mention in *Moore* of a particular type of packet (or message) that is broadcast periodically or mention of a node waking at a timed interval to receive a particular type of packet (or message), much less a periodically broadcasted polling message. In *Moore*, the communication unit wakes to receive any of a number of different types of frames rather than a particular type of message, for example, a periodically broadcasted polling message. For the sake of argument only, even if one of *Moore*'s frames could be a polling message, there is no indication that such a message would be periodically broadcast nor any indication that *Moore*'s communication unit would switch to the active state at regular intervals to receive a periodically broadcasted polling message. For at least these reasons, the Applicants submit that claim 52 is allowable over *Moore* and *Rypinski*, individually or in combination.

New Claims

The present amendment adds new claims 55 and 56. As mentioned previously, former claim 51 stood objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim (*i.e.*, former claim 42) and any intervening claims (of which there were none). New claim 55 shares various characteristics with former claim 51. Thus, the Applicants submit that new claim 55 is allowable for at least reasons generally analogous to the reasons for which former claim 51 was found to be allowable if rewritten in independent form.

New claim 56 is an apparatus claim that is generally analogous to method claim 55. Thus, for reasons generally analogous to those discussed previously with regard to claim 55, the Applicants submit that new claim 56 is allowable.

Final Matters

The Applicants are presently preparing an Information Disclosure Statement for consideration by the Examiner in the present application. If, at the time of examination, no such

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IDS has been received, the Applicants request that the Examiner contact the Applicants' representative via telephone at the number below to discuss the status of such IDS.

The Office Action includes various statements regarding the pending claims, the *Moore* and *Rypinski* references, and one of skill in the art, which are now moot in view of the previous amendments and/or comments. The Applicants neither agree nor disagree with such statements. However, the Applicants explicitly reserve the right to challenge any of such statements in the future should the need arise.

Summary

In summary, the Applicants believe that all pending claims 38-56 are in condition for allowance and courteously solicit a Notice of Allowability with respect to all pending claims.

At this point, the Applicants request an Examiner interview to discuss the Office Action and this response, in particular prior to the issuance of any final action on the merits. The Examiner may contact the undersigned at 312-775-8000 to schedule the interview at the Examiner's convenience. Also, if the Examiner has any questions regarding this submission, the Examiner is invited to contact the undersigned.

The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,

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